

**Notice of Allowability**

Application No.

10/083,932

Examiner

Ephrem Alemu

Applicant(s)

GRAY, RICHARD L.

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 7-19-04.
2. ☒ The allowed claim(s) is/are 1-13,31,32,38 and 39.
3. ☒ The drawings filed on 26 February 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

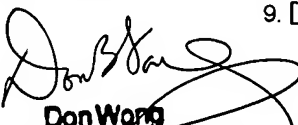
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying Indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date 9-27-04.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

  
**Don Wong**  
Supervisory Patent Examiner  
Technology Center 2800

## **DETAILED ACTION**

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jeanette S. Harms on 9-27-04.

The application has been amended as follows:

In claim 1, line 4, "based on" has been replaced with --such that--; and

line 4, "circuit." has been replaced with --circuit is forced to a predetermined value,

wherein determining the frequency includes:

generating a first signal functionally related to the duty cycle of the driving waveform;

generating a second signal functionally related to the current of the CCFL circuit; and

using the first signal and the second signal to determine the frequency of the driving waveform.--.

In claim 3, lines 1 and 2, "determining the frequency" has been replaced with --generating the first signal--.

In claim 4, lines 1 and 2, "determining the frequency" has been replaced with --generating the first signal--.

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In claim 5, line 2, “defined duty factor” has been replaced with --the predetermined value of the duty cycle--.

In claim 8, lines 1 and 2, “determining a frequency” has been replaced with --generating the first signal--; and

line 3, “proportional” has been replaced with --functionally related--.

In claim 9, line 9, “proportional” has been replaced with --functionally related--; and

line 16, “second DC signal is” has been replaced with --first DC signal and the second DC signal are--.

The changes have been made to overcome the rejection over Sasaki et al. (US 5,923,542) patent and to correct minor informalities.

***Allowable Subject Matter***

2. Claims 1-13, 31, 32, 38 and 39 are allowed.

The following is an examiner’s statement of reasons for allowance: It is agreed that the prior art of record fail to teach or suggest, alone or in combination, the following limitations: “generating a first signal functionally related to the duty cycle of the driving waveform; generating a second signal functionally related to the current of the CCFL circuit; and using the first signal and the second signal to determine the frequency of the driving waveform” as claimed in claim 1; “sensing a voltage at a second node that is proportional to a CCFL current; and generating a second DC signal that is proportional to a time-averaged voltage at the second node, wherein the first DC signal and the second DC signal are used in determining the frequency” as claimed in claim 9; “selectively resetting a capacitance of the capacitor to zero at the beginning of every dimming cycle

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of the CCFL circuit, thereby providing a soft start on the line” as claimed in claim 31; “selectively resetting a capacitance of the capacitor to zero to provide a soft start on the line; and switching to a second current source, thereby limiting the voltage increase to a second predetermined amount based on the second current source and the capacitor” as claimed in claim 32; and “using a first and second current sources, respectively, to maintain the first and second predetermined values during a first and second transition of the input signal” in a manner claimed in claim 38. It is for these reasons in combination with all the other limitations in the independent claims 1, 9, 31, 32 and 38, that claims 1-8, 9-13, 31, 32 and 38-39 are allowable over prior art of record.

#### ***Conclusion***

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### ***Correspondence***

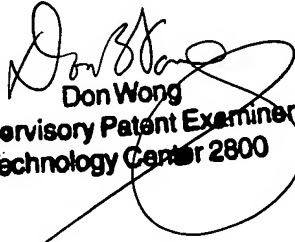
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ephrem Alemu whose telephone number is (571) 272-1818. The examiner can normally be reached on M-F Flex hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don K Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EA  
9-27-04

  
Don Wong  
Supervisory Patent Examiner  
Technology Center 2800